

NOTICE OF DRAFTSPERSON'S  
PATENT DRAWING REVIEWThe drawing(s) filed (insert date) 3-4-02 are:

- A. ☐ approved by the Draftsperson under 37 CFR 1.84 or 1.152.  
B. ☒ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.

<p>1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings: Black ink. Color. ____ Color drawings are not acceptable until petition is granted. Fig(s) _____ ____ Pencil and non black ink not permitted. Fig(s) _____</p> <p>2. PHOTOGRAPHS. 37 CFR 1.84(b) ____ 1 full-tone set is required. Fig(s) _____ ____ Photographs may not be mounted. 37 CFR 1.84(c) ____ Poor quality (half-tone). Fig(s) <u>23-33, 35-41, 43</u></p> <p>3. TYPE OF PAPER. 37 CFR 1.84(e) ____ Paper not flexible, strong, white, and durable. Fig(s) _____ ____ Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) _____ ____ Mylar, velum paper is not acceptable (too thin). Fig(s) _____</p> <p>4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes: ____ 21.0 cm by 29.7 cm (DIN size A4) ____ 21.6 cm by 27.9 cm (8 1/2 x 11 inches) ____ All drawing sheets not the same size. ____ Sheet(s) _____ ____ Drawings sheets not an acceptable size. Fig(s) _____</p> <p>5. MARGINS. 37 CFR 1.84(g): Acceptable margins:  Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm SIZE: A4 Size Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm SIZE: 8 1/2 x 11 Margins not acceptable. Fig(s) <u>20, 27</u> ____ Top (T) _____ Left (L) ____ Right (R) _____ Bottom (B)</p> <p>6. VIEWS. 37 CFR 1.84(h) REMINDER: Specification may require revision to correspond to drawing changes. Partial views. 37 CFR 1.84(h)(2) ____ Brackets needed to show figure as one entity. Fig(s) _____ ____ Views not labeled separately or properly. Fig(s) <u>1, 3, 7, 10, 12, 14-16, 18, 47, 48, 50-53, 56</u> ____ Enlarged view not labeled separately or properly. Fig(s) _____</p> <p>7. SECTIONAL VIEWS. 37 CFR 1.84 (h)(3) ____ Hatching not indicated for sectional portions of an object. Fig(s) _____ ____ Sectional designation should be noted with Arabic or Roman numbers. Fig(s) _____</p>	<p>8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i) ____ Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) _____</p> <p>9. SCALE. 37 CFR 1.84(k) ____ Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s) _____</p> <p>10. CHARACTER OF LINES, NUMBERS, &amp; LETTERS. 37 CFR 1.84(l) ____ Lines, numbers &amp; letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig(s) <u>4, 5, 9, 11, 21, 34-46, 47, 56</u></p> <p>11. SHADING. 37 CFR 1.84(m) ____ Solid black areas pale. Fig(s) _____ ____ Solid black shading not permitted. Fig(s) _____ ____ Shade lines, pale, rough and blurred. Fig(s) _____</p> <p>12. NUMBERS, LETTERS, &amp; REFERENCE CHARACTERS. 37 CFR 1.84(p) ____ Numbers and reference characters not plain and legible. Fig(s) <u>4-12, 14-16, 20, 21, 22, 34-47, 48, 49, 56</u> ____ Figure legends are poor. Fig(s) _____ ____ Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1) Fig(s) _____ ____ English alphabet not used. 37 CFR 1.84(p)(2) Fig(s) _____ ____ Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3) Fig(s) _____</p> <p>13. LEAD LINES. 37 CFR 1.84(q) ____ Lead lines cross each other. Fig(s) _____ ____ Lead lines missing. Fig(s) _____</p> <p>14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(i) ____ Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) _____</p> <p>15. NUMBERING OF VIEWS. 37 CFR 1.84(u) ____ Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) _____</p> <p>16. CORRECTIONS. 37 CFR 1.84(w) ____ Corrections not made from prior PTO-948 dated _____</p> <p>17. DESIGN DRAWINGS. 37 CFR 1.152 ____ Surface shading shown not appropriate. Fig(s) _____ ____ Solid black shading not used for color contrast. Fig(s) _____</p>
<p>COMMENTS</p>	

REVIEWER

J. CHASE

DATE

2-20-03

TELEPHONE NO.

703 305 8430

ATTACHMENT TO PAPER NO. \_\_\_\_\_

## REMINDER

Drawing changes may also require changes in the specification, e.g., if Fig. 1 is changed to Fig. 1A, Fig. 1B, Fig. 1C, etc., the specification, at the Brief Description of the Drawing, must likewise be changed. Please make such changes by 37 CFR 1.312 amendment at the time of submitting drawings.

## INFORMATION ON HOW TO EFFECT DRAWING CHANGES

### 1. Correction of Drawings - 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if an application number has not been assigned to the application). If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required by a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** short statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawing should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

### 2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed change.

### Timing of Corrections

Applicant is required to submit the drawings corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.